THE

Secrets and

wonders of the world.

A BOOKE RIGHT
rare and ſtraunge, containing
many excellent properties,
giuen to Man, Beaſtes,
Fouſes, Fiſhes and
Serpents, Trees,
Plants &c.

Abſtracted out of that ex-
cellent naturall Hiſtoriographer
Plinie. Tranſlated out of
French into Engliſh.

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Popes head.
1585.

1585

To the vvorshipful

and his very good friend Maister

Richard Candler, as one that wisheth
the fauour of God long & happy
life, encrease of worship,
with continuall health
and felicitie.

SO it is worshipfull Syr, I haue deuised with my selfe many times howe to gratifie you with some token of my good will towardes you, but welth and abilitie lacking to accomplish my desired pretence, yet nowe at the last, I haue presumed knowing your wonted curtesies towardes all men, to dedicate this Abstract of Plinies desiring you to take it with as good a will as I haue ment it, till hereafter that some seriusser matter come to my hande, and thus I bid you most hartely farewell in the Lord, who keepe you and all yours, prosper and preserue you in all your good and godly enterprises. Amen.

Yours to vse. T. H.

To the Reader.

HEre hast thou gentle Reader, set forth vnto thee this Booke, named The Secrets and wonders of the Worlde, abstracted out of the sixteene first Bookes of that excellent naturall Historiographer Plinie, for the straungenesse and worthinesse thereof, I referre thee to thine owne iudgement, requesting thee to take this in good part, & shortly shalbe by Gods grace, set forth vnto thee three worthy and learned bookes, the first is of the Cituation of the world, writtē by Pomponius Mela, The second is a perfite Peregrination and true discouerie of Græcie, Turkey, Arabia, and Siria, with the maner of their Cities, and their Antiquities: The third is, Iulius Solinus Pollihistorie, the which bookes thou shalt finde both to be pleasant and profitable, And thus I bid thee farewel in Christ, who keep vs. Amē.

The Secretes and

wonders of the World, abſtracted

out of the principall of the naturall Hiſtoriographers.

PLINIE the naturall Hiſtoriographer, was borne vnder the Emperour Tyberian, and died vnder Titus, the Emperour that deſtroyed Hieruſalem, after the death and paſſion of our Lord Jeſus Chriſt, in which time he did attribute his workes. In the firſt booke (which is briefe,) he maketh his preambles. In the ſecond, he treateth of the worlde, and of other matters.

He deſcribeth that the worlde is alone and round, naturally vnmoueable, although that there are certaine places moueable, and that may moue, by the concauites of the earth, being full of winde.

There are foure Elementes, the Earth, the Water, and the Fyre aboue the Ayre, nere to the firſt firmament. Which is fire natural, and therefore there nedeth no wood to continue the ſame.

Under the Earth are the Planetes, which are called Strayers, and yet they moue leſſe then the others, but it is of the mutation of their influences, & of the Firmament: among the which is the Sunne rector and the guider of the other Planets, principall gouernour of nature.

The other Starres are not attributed (as ſome doe thinke, as the greateſt and cleareſt to the rich: and the leaſt to the poore, and the obſcure and darke ſtarres, to thoſe that

of nature are infected. For we haue no such societie with the Starres, that they shoulde die with vs, and therefore they are equally deuided, seruing to eche one.

The Mone hath her Planet comming before her, as the Sunne hath the day Starre, she doeth encrease and diminish, and sometimes is at the full, and sometimes shee hath hornes, euen as the Sunne doeth giue and take away her clearenesse.

The earth is betweene them both, the Mone is in the first heauen, the Sunne in the fourth, and when the one is highe, the other is lowe, and the other Starres are more higher in the Skie, and therefore they seeme lesse then the Mone. The obscuritie and darckenesse of the Mone, cõmeth by the humours of the earth that is drawen or sucked vp from the earth.

By the Geometrie of this woorlde, the Stade which is fourtie roddes, doeth containe 125. paces, the whiche are 525. fote. Sometimes there hath bene seene in the appearance, three Sunnes, and three Mones.

In the Aire it raineth sometimes naturally Stones, suckt vp by the vapours of the earth, sometimes Frogges, and some time blood in diuers figures.

The Heliotropium in his floure, doeth turne euery day and followe the Sunne.

The Ant doeth neuer beginne to hourde vp but in the full Mone.

The nature of the windes are diuers, according to the diuersitie of Countreies, and they proceed of the earth, and of the vapours of the same, which causeth sometimes in many places Earthquakes.

The Thunders and Lightnings, doe neuer fall in the winter, for the coldnesse of the ayre doth keepe them in and choakes them, and therefore they fall in the Sommer, and many times they marre the Wine, without touching the vessell.

There was a woman at Rome, whose childe was slaine within

within her wombe, by thunder and lightning, and the woman had no hurt at all.

Three things there are that neuer feele any harme by thunders and lightnings: the Laurel tree on the Earth, the Eagle in the Skie, and the Seacalfe in the Sea, for they neuer fall vpon their skinnes, therefore best assured are they that are so clad.

Naturally there are signes and tokens in the earth, the Sea, and the Aire, and therefore it hath rained sometimes Blood, Stones, Woll, yea great stones accumulated in the ayre by the coldnesse thereof.

The Rainebowe is not seene in a close and rainy day, but the Sunne beames entring into the concauites of the Earth, doe reflexe the Sunne, and make varietie of colours, by the mixture of the cloudes in the aire, and is seene most commonly in the Sommer. Also there are neuer lightly seene aboue two Rainbowes.

The earth is the mother of all liuing creatures. In the aire is seene many times darkenesse & clowdes, the Hailes are deriued of the waters, but the earth is lowly, seruing to all creatures, she bringeth forth Corne, Wine, Fruites, and all kinde of things pertaining to man. Shee bringeth forth Iron, Lead, Golde, Siluer, precious Stones, and Herbes, seruing vnto mans health, yea, if that a Serpent chaunce to bite any person, the earth will not receiue that Serpent when it is dead.

The earth is compassed round about with waters, the which is more knowen by experience, then by arguments, and some part thereof is not inhabited towards the North, because of the great colde.

An other part is not inhabited because of the extreame heate, towards the South.

The middle of the earth is the Centry, to the which most waightiest things doe take holde.

In some places there is no shadowe of the Sunne, specially in Alexandria the great, where as there is a deepe

well without shadowe.

Anaxemenes Milesius, was the first founders of Dials.

There are many signes of mouings, and mutations of times, without great appearance, as in the Sea, when that without winde, the waues doe rise and rage. And in the Skie, when that there is a long stripe or line: and when that the well waters are troubled.

Two mountaines haue bene seene naturally hit and touch one another, as if they had foughten, the waters méeting together to striue and marueilously to encrease, and beastes to dye.

In Asia twelue Cities were subuerted by the Earthquakes, without perceiuing thereof at Rome.

Neare vnto Rome there are two hundreth acres of ground, the which doeth shake when there are horses running thereon.

In the Ile of Paphos there is a place where there did neuer fall rayne. And in the same Ile Nea in the Citie of Troados, the sacrifices do neuer putrifie nor rot.

Nere to Harpasa a towne in Asia, there is a great Mountaine, that one may shake with their finger, but if you put your whole strength to it, it remaineth vnmoueable.

There are two Mountaines neare to the flood of Nyle, the nature of them are diuers, for the one retaineth vpon, the other casteth it off, in such sort, that if any of their shoes be clouted with nailes, that goe vpon the said hill, they can neither go nor stande, but are cast off: and on the other hil, their shoes will sticke fast.

In the Citie of Charagena, there is a certaine grounde that healeth all kinde of sores and diseases, the Sea doeth purge in the full Moone: and the fluctuations of the Seas, commeth by the Sunne and Moone, the which causeth it. In the hie Sea there neuer falleth snowe, the Sea is most hotteste in Winter, and saltest in Sommer. Of fresh waters there are diuers sortes.

In Dodone is the Fountaine called Iupiters Spring, which

which doeth kindle firebrandes, it diminisheth at Nowne, and encreaseth at midnight, and then afterwards decreaseth, and faileth at midday. There are many hote waters, because of the smoke & closenesse of the hilles, from whence these hote waters spring.

There are Springs that will make blacke Shéepe become white, and other waters that maketh white shéepe become blacke, by continuance of drinking, and others that the ewes that drinke in thē their milke will become black.

At Lincestis, there is a Fountaine of water, that will make them that drinke thereof drunken.

Also in Paphlagonia, and in the field Calenus, in the Ile of Andro, there is a Fountaine or Spring, that rendreth wine euery yéere in the Nonas of Januarie.

In a fielde called Carrimensis, in Spaine, there is a Riuer that will make the fishes that are therin, to séeme of the colour of golde, and if they are put into any other water, they will séeme as other fishes.

Among the meruailes of fire, the Mountaine called Ethna, in Silicia, burneth continually, the flames whereof are séene aboue the hill toppe. An other hill that is called Chimera, burneth in like maner, the fire of which hill is soner quenched with earth or with hay, then with water.

In the third, fourth, fifth, and sirth bookes, Plinie describeth the earth, the waters and the Ilandes, and deuideth the worlde into Asia, Affrica, and Europa. Asia conteineth the halfe of the world, in the which is Armenia, Capadocia, Albania, Suauia, where as there is no mettall but gold. Scithies, where as is the swéete Sea, and there are trees that bring forth silke, ready to spinne.

India, where there are people very riche, they labour with Elephantes, and go to warre with them. Their king hath ordinarily sixe hundreth thousand fotemen, thirtie thousand horsemen, & nine thousand Camels to his gages, and to his daily cost, and when they be so olde that they can scarse sée, nor can liue no longer, they cast them selues into

a great fire.

Beyonde the Indians, is the Ile called Taprobane, where as is the grœne Sea, and there is planted precious stones, with mettalls of gold and siluer.

The men of that Countrey are more greater then others, they sell their marchandise by making of signes, the Mone neuer shineth with thē aboue fire houres, they haue small edifices or buildings, & their vitailes neuer wareth deare: for their God they haue Hercules. They doe elect and chose an olde man to their King, which hath no children, and if he chaunce to haue any whileſt he is king, they doe kill them, to that ende that the kingdome be not inherited by their elected king: they doe constitute.xxx. gouernours, without whose assent none can bee condemned to death. If their king doeth misdoe, they doe punish him, or depose him from the crowne.

This nation taketh great delite in the chase of Tigres and Elephantes, and doeth abounde in corne and fruites, they doe delight to fishe for shell fishes, which are there very great, in so much that one may hide themselues in their shelles.

Alexandria the great was founded by the great king Alexander, and neare vnto that is the redde Sea, by the repercussion of the Sunne, that doeth so colour it, or els for that the mood and the grauell is such, or for that it is the nature of the water.

Also Siria and Arabia, whose people are tāned and heary all saue the head, and they are apparelled with the skinnes of fish.

There is also Mesopotanie, Babylon, Assiria, Arabia: the flood of Tyger, hath his originall in a fountaine of Armenia.

In the Ile of Sagaros, there can no Dogge liue, for as sone as he entereth into the Ile, he turneth round till hee fall downe dead.

The Sabiens are riche with the fertilitie of their Forests,

reſts, with mettals, Hony, and Ware.

The Candeans liue with Serpentes, and in the Ile of Gagaudes was firſt founde Popeniayes.

Idumea, Iuda, Hieruſalem, Galile, Sirie, Paleſtin, which was the firſt founder of letters, and at the firſt, in ſtéde of letters, vſed certaine figures of beaſtes.

Alſo there is a Nation called Heſſeneans, liuing without wyues, and without lecherie. When they are dead, they are caſt into the Sea, they liue without money, and growe of the dead.

Of the Ethiopians there are diuers formes and kindes of men. Some there are towards the Eaſt, that haue neither noſe nor noſtrelles, but the face all full. Others that haue no vpper lippe, they are without tongues, and they ſpeake by ſignes, and they haue but a little hole to take their breath at, by the which they drinke with an Oten ſtrawe.

There are ſome called Syrbote, that are eight fote high, they liue with the chaſe of Elephantes.

In a part of Affricke, be people called Ptoemphane, for their king they haue a Dogge, at whoſe fantie they are gouerned, to whome they doe pronoſticate their doings, and their conduct in warre.

Towards the Weſt there is a people called Arimaſpi, that hath but one eye in their forehead, they are in the deſert and wilde Countrey.

The people called Agriphagi, liue with the fleſh of pãthers and Lyons: and the people called Antropomphagi which we call Canibals, liue with humaine fleſh.

The Cinamolgi, their heades are almoſte like to the heads of Dogges.

Affrica aunciently called Libia, doeth containe the Moores, and the pillers of Hercules, (among the flods) there is Onylus that doeth ingender Cocodrils.

There are godly Forreſts with vnknowen trées, ſome of the which trées beare ſmall threades, of the which is

made

made clothing of Cotton.

Cyrenes and Syrtes, make their houſes of ſalt ſtones, cut out of the mountaines, there is the mountaine of Giry, the which doeth ingender and bring foorth many precious ſtones.

In Libie, which is at the ende of the Ethiopes, there are people, differing from the common order of others, they haue among them no names, and they curſe the Sunne for his great heate, by the which they are all blacke ſauing their teeth, and a little the palme of their handes, and they neuer dreame. The others called Troglodites, haue Caues and holes in the grounde, and haue no other houſes. Others called Gramantes, they make no marriages, but all women are common. Gamphaſantes, they goe all naked.

Blemmy is a people ſo called, they haue no heads, but haue their mouth and their eyes in their breaſts. And others there are that go more by training of their handes then with their feete. There are gathered the ſpices, and there is nothing that they are afrayde of, but of great dogs that will barke at them, and bite them.

Africke beginneth beyonde the Realme of Spayne and Grenado, and is deuided in the Sea of Europa, as betweene Douer and Calis, there beginneth the Kingdoms of Feoz, of Tunis, of Barbaria, of Carthage, & of others of the Ethiopians.

Europia beginneth from the Sea Meditarene ſo called, becauſe it is a flood in the middeſt of the world. Upon this Sea that deuideth Aſia and Europa, the King Xerſes cauſed to be made a bridge of ſhippes, ſuch a number hee had for the warre.

Europa conteineth Rome the auncient Citie, the plentifull Italy, Venice deſcended of the Troyans, Greece, Theſſalia, Acaia, Macedonia, and Theſſalie, where as is a flood called Peneus, nauigable in the middeſt, for into the ſaide flood entreth the Riuer of Orcon, but his water ſwimmeth aboue the other, without mingling together as doeth Dyle. Italy hath the noble Riuer of Poſte, bearing vaines of golde.

In the Iles of Pont, there are people that line with the egges of wilde foule, others that haue féete like horses, whose eares are so great and so long, that therewith they couer their whole bodies.

Europe doeth containe Germanie, which is hie and base Almaine, Burgony, Sauoy, Brittaine, Gaule that is deuided into thrée partes.

From the Riuer Lescault to the Riuer of Sayne is called Gaule the faire, from Sayne, to Gyrrond, is Gaule the anciẽt, and conteineth Lionois, and from Girronde to the hilles of Pirennes, that deuideth Spaine and Fraunce, is Aquittaine.

Spaine also is of Europia where as is Cathelognia, Araragon, Castilian, Portingall, Syuell, Andelosia, Leon, Galicia, and the kingdome of Granado, euen to the Sea.

The seuenth Booke treateth of man.

THe world hath brought forth many things, of the which man is almost the least. Hée hath clothed the Beastes, Birdes, Fishes and Trées, with skinnes, feathers, scales, barke, and otherwise. But man commeth forth all naked ready to weepe, and lightly before fourtie dayes, he doeth not laugh: he that ought to raigne ouer the beastes on the earth, is at the beginning weaker then any, he knoweth nothing without hée be taught, neither to speake nor to goe; and naturally doeth nothing but weepe.

Naturally the beastes séeke their liuing, flie from their enemy, swimme, with many other things giuen them of nature. The Lyons doe not warre betweene themselues, the Serpents doe not bite one another, but men studie howe to destroy one another by warres, and dissentions.

Men neuer lightly in all points resemble one like another in their faces, the which commeth by the diuersitie of the cogitations of their parentes, the which maketh their

ſimilitudes ſo farre vnlike: and therefore the brute beaſtes that haue no ſuch varieties in their thoughtes, engender none but their like.

Men there are called Arimaſpi, that haue but one eye in their forehead, which inceſſantly warre againſt the Griffons about mettals, and they finde in the ground golde and other mettalls. Thoſe that are toward ỹ end of the Weſt, drinke in dead mens ſculles.

In Albania, ſome haue their eyes yellowe, that cõmeth to them in their youth, & they ſee better by night then by day.

In Affrica in ſome places there are a great multitude of Serpentes, whoſe properties they vſe for the triall of their wyues chiefly, after this ſort.

If the husbandes will haue probation of the honeſtie of their wiues: they will preſent their children before the Serpentes, which will flye awaye if that the children bée legitimate, but if that the Serpents remaine and feare not, then are they baſtardes.

When they are bitten with Serpents, they put their ſpittle vpon the place for to heale it, ſpecially their faſting ſpittle, for the Serpẽt feareth mans ſpittle as hote water.

In India there are hye men, and alſo marueilous hye beaſtes, as for a witneſſe there are Dogges as great as Aſſes, trées as hye as an Archer can ſcarce ſhote to the top, and vnder the ſhadowe of one Figge trée, may a hundreth horſes ſtande, becauſe of the fertilitie of the lande, the temperance of the ayre, and the aboundance of waters, there are men fiue cubites in height, the which neuer vſe to ſpit, nor are troubled with the paine of head, eyes or teeth, and are ſeldome ſicke.

Others there are in the Mountaines, with heads like Dogs. In a part of India the women neuer beare children but once, whoſe children ware ſtraight way olde.

And others called Sciopedæ ỹ haue their fæte ſo broade that when they are layde, they couer them therewith from the heate of the Sunne, and they be very ſwift in running.

Some

Some toward the East haue no heads, but haue eyes in their shoulders, and others called Epithamai Pigmei, that are of one yarde hye.

In the farther part of India towards the East neare to the Riuer of Gangis, there is a people clad with leaues, that liue by smelling, they neuer eate nor drinke in their iourneies, they beare floures and rootes to smell at, and they are easely killed by filthy smelles and sauours.

There are little men called Pigmei, among which the highest passe not the height of two cubites, hauing a wholsome aire and pleasant countrey where they dwell, the which men are molested with Cranes, as writeth Homer, therefore it is no maruell though often times they are caried away with those Cranes.

In the spring time the Pigmei assemble together mounted vpon Sheepe and Goates, armed with dartes and arrowes, for to descende downe to the sea, and for the space of three monethes, consume and breake the Cranes Egges, and kil the yong ones, otherwise they would so multiplie, that those little men should neuer rest in quiet.

Some there are in the valleys called Pandore, that liue two hundreth yéeres, in their youth hauing white haire, in age their haires become blacke.

There is a people that liueth but fourtie yéeres, whose wiues doe bring forth children at the age of seuen yéeres.

There are people that haue long hairie tailes growing. These things and others hath nature made monstruous, for our examples.

Among the womẽ there are diuers childings, some haue had fiue children, some eight, and some nine, and sometime children of diuers kindes, which are called Hermaphrodites, which are both man and woman.

There hath bene that haue had in their life time thirtie Children, and among the maruailes of the worlde, a childe being new borne did enter againe into his mothers wõbe, in the Citie of Saguntra.

And it is no fable nor tale, to haue seene women and maydes transformed into men. The females are sooner engendred then the Male, and become soonest olde, the Females doe moue in their mothers wombe, most on the left side, and the males on the right side.

And Plinie reciteth to haue seene a maide, on the night of her marriage, to be naturally transformed into a man, and incontinent her beard to growe, and shee to be married againe to a woman.

If that a woman bring forth two children at one burthen, lightly there is short life, either to the mother, or to one of her children, and if they be both Males, or Females, then are they lightly of a short life.

Among the women there is no certaine time prefixed of their trauailings with childe, for some bee deliuered in seuen moneths, some in eight, and most commonly in nyne moneths. Also sometime at ten and eleuen moneths.

Before the seuenth moneth the childe hath no life, the tenth day after shee hath conceiued. Paine in the head, a shadowe or mist before the eyes, no taste nor relish in meates, and a vndigesting stomacke, are signes of conception. That woman that bringeth forth a Male childe, hath better colour, and easier deliuerance.

Miserable is the condition of man. For the Princes by this meanes haue their originall, and are subiect to Fortune, and hath nature as others.

We reade of a Romaine Prince that died in the morning in pulling on his hose, an other died with the stinging or biting of a Grape, an other was choaked with a haire, in eating of Milke.

Scipio Affricanus was the first called Cæsar, for that (Cæsus fuit matris Vterus) his mothers wombe was opened, for him to passe out.

Of those that are cripple, lame, and conterfeite of nature, commeth whole limmed and perfect children, in their members: and sometimes of perfect and wel proportioned people,

people commeth lame and vnperfect children.

A woman doeth not beare children after fiftie yéeres, & there are many that ceasse at fourtie.

As touching men, we reade truely of a Prince, which at the age of foure score and fire yéeres begate a childe.

When Cato was borne, his father was foure score yéeres olde.

Vnto children their téeth come commonly at seuen monethes, the seuenth yéere they renue, for then their téeth fall, and there commeth to them others, and some are borne with téeth. And if that a dead bodie be burned, the téeth will neuer burne but remaine whole. Vnto some their téeth faile them at middle age, comm only a man hath thirtie two téeth, and hée that hath more, is estéemed to be the longer liuer.

Zoroastes did laugh that day hée was borne, yea that with the very force of laughing he did reiecte the hand that was vpon his head, for the placing and fashioning of his head, and setling of his braines.

A man is as long from the foote to the head, as the extending or spreading abroade of his armes, counting from the great fingers.

Men doe way more then women, the dead bodies way more then the liuing, and those that are a sléepe, way more then they that are awake.

Some liue without marow in their bones, and therefore they neuer thirst, and for this cause women drinke lesse then men: and such doe neuer sweate.

It is recited of Crassus the Senatour, that he did neuer laugh. Socrates the great clarke, was neuer séene mery nor ioyfull, nor angry at one time more then at an other, and therefore mens complexions are diuers.

In Rome hath bene séene a Princesse called Antonia Drusi neuer to spitte, Pomponius neuer to belke. The strength of men hath bene great, and more in one than another. It is read of one that with one hande did holde a

Chariot, that three horses could not make to goe forwards nor remoue.

Hercules, did carrie his great Mule on his backe.

Fusius Saluius did beare two hundreth on his feete, two hundreth in his hands, and two hundreth on his shoulders, so being loden or charged with fiue hundreth waight, went vpon a ladder.

Plinie writeth to haue seene one named Athanatus, to haue a iacke on his backe waying fiue hundreth waight, going to a play with shoes on his feete waying fifty pound waight a piece.

Milo set his foote in a place, from which place, there was no man able to make him goe backe or remoue. If that he helde a staffe in his hand, there was no man able to take it away or withe it out of his fist.

For running there hath bene many light and nimble men, that would runne a thousand a hundreth & threescore furlongs a day and more.

Also there are some that haue their sight very singuler.

We reade of a man called Strabo, of the countrey of Sicilia, that is toward the East, to recken and count the ships that parted from Carthage for to enter into the South sea.

Cicero did recite that he did see the Iliades of Homer in verse written, being included in a Nut shell, so small were the figures.

Marmecides made a Cart, or Wagon so litle, that a flye did couer it. And he made a ship that a Bee might couer it with both her winges.

For a trueth there haue bene people y haue heard battailes and fighting fiftie Leagues of, for they haue counted the time and houres of the assaultes. The memorie hath bene very singuler to some.

Cyrus King of Perse, had the memorie to know and call euery one of his armie by their names.

Methridates the king did talke one day to his people, in two & twentie languages without stutting or stammering.

Others

Others lése their memorie by fantasies, or otherwise haue forgotten their vnderstanding.

Messalla the Orator, did forget by grieuous sickneſſe his sciences yea his owne name (in such sort) that hée kneiwe not from whence he was.

Marueilous was ỹ memorie of Iulius Cesar, the which named to foure Scribes or writers at one time, and in the meane time, he read, writ, and heard, and if he had no other affaires, he would name to seuen. He fought 52. battailes.

And Marcellus 40. Cesar in his battailes is reputed to haue slaine of his enemies 1192. thousand men.

Pompeus did spoile and take from the Pirates, and sea robbers, againſt whome he was sent by the Romaines 876. ships. Moreouer Cesar had this constancie, that the letters that Scipio did sende him for to betray Pompeus, hee cast into the fire, without reading them.

Cato was accused to the Senatours 42. times, and alwaies absolued. Sicinus dictator of Rome sustained fiue score battayles: he had fiue and fourtie woundes before, and not one behinde. Sergius was a worthie warrier, he deliuered Cremona from the siege, kept Placentia, toke in Fraunce twelue Castels and Townes. He had his right hand cut off, and he made one of Iron, with the which he fought foure battailes.

Pitifull things are found worthy of memorie, thorowe all partes, among the which, it commeth to my remembrance, of a woman taken in Rome, for to dye for offence, and being put into straight Prison there to be famished, her daughter had licence of the Jailer to goe sée her every day, but she was searched for feare leaſt shée should bring her mother foode.

In the ende it was founde, that euery day shée did giue her mother sucke with her breaſtes, and for to satisfie her, she came daily.

The Senators hauing intelligence thereof, did pardon ỹ mother for the vertue that was in the daughter, & did appoint

point them a liuing during their liues. Marueilous are the operations of humaine creatures, among others onely of paintings, that doe resemble the liuing so nære, that there resteth nothing but the speach.

The king Attallus bought a table or picture of a Painter, which cost a hundreth Markes. Cæsar bought two for eight hundreth Markes.

Mans age hath bene reputed great among the ancients, which doe name Princes and Kings to haue liued eight hundreth yeeres, and a thousand yeeres, but it is by the varietie of yeeres, for some make the Sommer a yeere, and the Winter another yeere, and others make three moneths a yeere, as the Arcadians, and you must not stay nor iudge things by the constellation of the firmament.

For in one present houre many are borne as well seruants as maisters, Kings and Magistrates, whose Fortunes are all diuers and contrarie.

Many examples we haue of sicknesses. Publius Cornelius Rufus, in dreaming to haue lost his sight, became blinde and lost his sight. Some there are that liue but till middle age, and others that die in their youth, and nature doeth giue a man nothing better then short life.

To liue long the senses & vnderstanding become blunt, the whole members feele dolour, the sight, the hearing, and the going faile, the teeth also, and the instrumẽts of meats: therefore age is but paine, and there is a time prefixed to liue.

We reade no better example then of Zenophilus the Musitian, that liued a hundreth and fiue yeeres without sickneſſe. The signes of death, are to laugh in the furor and griefe of the maladie or sickneſſe, to be busie in folding or doubling the clothes of his bedde with his handes, to voyde from one in sleeping behinde, a fearefull loke, with other things, and therefore seeing that by experience we see innumerable signes of death, therefore there is no certaintie. Sicknesses are diuers both to olde and yong.

Sirius

Sirius died by the multitude of Serpentes proceeding from his body.

Some haue had an Ague all their life time. Mecænas was seuen yeeres in the ende of his dayes without sleepe.

Antipater liued long without sickenelle, sauing that euery yeere on that day that he was borne, he had the ague.

We reade of one that liued 157. yeeres, that slept in his age 57. yeeres, and wakened as though he had slept but one houre. Others that haue returned a foote from their graue, when they were borne to be buried.

Pompeus caused a mans head to bee smitten off, which when it was layde againe to the body, did speake an houre, both to the maister of the house, and to many others of the house. Death bringeth repentance. Some die for ioy: men in the hearing of ioyfull newes, of victories, and women to see their children.

The father of Iulius Cæsar died in putting on his hose, and felte before no harme. Some in drinking, some in writing, and others in diuers maners as we daily see by experience. Auncientlye the vse was among the Romaines to bury the dead, but for the often battailes of the Romaines, that had all the worlde in their subiection, they vse to burne the dead.

Among men Liber Pater found first the meanes to sell and buy, also Diademes for kings, and for triumphes.

The Lady Ceres founde the meanes to sowe corne, and to grinde it, and therefore she was called a Goddesse. For before they vsed Acornes.

The Assirians founde first the meane to write letters, but the inuention hath bene since ỳ beginning of the world.

Two brethren in Athens founde first the meanes to make houses and bricks.

Gellius Doxius inuented lathing and loming of walles, for before they had Caues and holes in the grounde, and they toke example of the Swalowes, which do make their neastes.

Cynira ſonne to Agriope, foũd out mettal of copper, braſſe, & of lead, he made firſt many hãmers therewith. Danaus was the firſt in Grecia ỹ made welles, & digged for water. Thraſon made the firſt walles & towers. The Lidians found the meanes to dreſſe wolls. Arachneus found ỹ meanes to make Linnen, & Cãuas. The Egyptians ỹ art of medicine. Lydius to mingle & tẽper mettals together. Erichtonus found ſiluer. Cadmeus gold in ỹ moũtaine of Pangy. The Ciclopiãs were the firſt workers of ſmall Iron worke. Corebus ỹ Athenian made earthẽ pots. Theodore ỹ Samyan made ỹ firſt keyes. Palamides ỹ meaſures & waights. Phrigies ỹ charrets & wagons. Penius the firſt trader for Marchandiſe. Ariſteus to make oyle and hony. Briges of Athens did firſt yoke Oxen to Cart and Plough. The Lacedemonians founde Yarneſſe, and habilimẽts for warre, Laũces, Spears, ſwords, Bucklers, &c. Cares ỹ Bowe & Arrowes. The Phenitians ỹ croſſe boines. Belerophons firſt moũted vpõ horſes. Palamides in ỹ warre betweene the Grekes & the Troyans, found ỹ order of Stãdarts, ſignes, pennõs, ſtreamers, to giue warning & to keepe watch. Iaſon did firſt ſayle on ỹ Sea in long Shyps, or Galleys. Before ỹ time there were made little ones of wood, & hydes: & ſince that time ſome haue added to thẽ maſts, ſayles, cabels, tackelings, & many other things, that we ſee by ỹperience to be neceſſarie. The firſt Dials were made at Rome wõ water, according to ỹ courſe of the Sunne, & ſince they are reduced to houſes & Churches, as it is ſeen at this preſent, which was very agreable to ỹ Romaines. Finally, among al ỹ knowledge ỹ man hath (Plinie) thinketh this to be the chiefeſt point, for man to know him ſelfe, of what eſtate ſoeuer he be.

The eight booke treateth of beaſtes

that are on the Earth.

IN the Earth there is no beaſt greater then the Elephant, they haue knowledge to vnderſtande their Countrey ſpeache, they haue obedience and vnderſtande their dueties and charges, they neuer paſſe the Sea tyll

that

that their maister or gouernour doth promise to bring them home againe, they kneele down for to be loden, & carrie the Ladies litters in feare, prudence & equitie: their teeth are of Iuorie, wᵗ their other bones there are made goodly workes, they are full of clemencie, & if they chaunce to finde a man strayed out of his way, they knowe it, and will leade him through ẏ Forrest into his way: but if they finde a cõpany of men seeking to chase thē, then naturally they know their enemies, as other beasts do. The Females neuer haue but one yong in their liues, they liue 200. & 300. yeers, they loue the shallow & cleare waters, for because of their greatnesse they can not swim, they eate stones & earth, they feare cold, they will cast to ẏ ground wᵗ their fronts or foreheads, trees for to eate ẏ fruit. Among ẏ beasts they hate Mice, & Rats, and they will not feede where as they haue rumne & tasted. They increase in ẏ borders of Affrica, & the greatest in India, where as there are Dragons so puissant ẏ they fight wᵗ the Elephãts. They are tamed by famine, & when they are tamed, they cary Castels on their backs in stead of saddles, wherin there may stãd vi or eight mē, & toward ẏ East they make in thē the most part of their battails, although ẏ they being wounded or hurt do retire. There were Elephãts at Rome, but they were slaine wᵗ shot, for the Romains would not nourish thē, nor giue them to Princes. The Ethiopians make thē their venison, & they kill thē wᵗ shooting & casting darts, which they cast on thē standing in trees, where ẏ Elephants vse to passe, or els they take thē in holes or caues in the earth couered aboue, they neuer lie down, but sleepe leaning against great trees, & they ẏ knowe their repaire, wil sawe ẏ tree so far, ẏ when they come to rest thē against the tree, it breaketh, & they fal downe, then they kil thē, (for being once down, they cã neuer rise again.) The blood of Elephãts is very cold, & therefore ẏ Dragõs & Serpents in ẏ countrey do assemble vnder their eares & on their bodies, & sucke from them so much blood, that they therewith die.

Dragons there are in Ethiopia, of ten fadoms long, and

in India, there haue bene founde Serpentes of a hundreth foote long, and some will flye in the ayre to catch birdes in flying.

In Affrica there are a great number of wilde horses, and in Asia great Asses like vnto Mares, but for their long eares. So writeth Aristotle the wise, which was appointed by Alexander the great, to describe the diuersitie and nature of beastes.

The Lyon is ful of noblenesse & clemencie, the Lionesse for the first time bringeth forth fiue, the next yéere after foure, then three, and when she bringeth but one, then shée ceaseth. The yong ones are two moneths without mouing, and fiue moneths before they can goe, they doe soner assaile men then women, and neuer yong children, vnlesse it be for great famine.

In their age they loue and followe men, when that they can no more séeke their pray, and they liue till their teeth fall out. By their clemencie they demaunde nothing of those that prostrate themselues before them, and their yre is mitigate by prayers, as we haue séene by the experience of women that name themselues strangers, and poore vagabondes, but they are fierce to those that striue against them, their taile doeth demonstrate their amitie and furor, as doeth the eares of horses. When they are chased they neuer hide them, they knowe and pursue among others those that hurt them.

The female if that her yong ones are taken, closeth her eyes against those that chase them, to the end that she feare not their weapons.

Hanus was the first that daunted or tamed their fiercenesse, and they are taken in holes that are made of purpose in the grounde. In Syria they are all blacke.

The Panthers are also full of clemencie. Wée reade that if the Female meete a man strayed or lost in the woodes, that fleeth for feare of her, shée will compasse him mouing vp her taile, shewing vnto him a signe of amitie & loue,

loue, and after that hæ is assured, she will leade him into a caue or hole, where as are fallen her yong ones by misfortune, which the man pulleth out, and then she tumbleth and playeth before him to giue him thankes.

The Tygres are very light and nimble, therefore those that steale their yong ones, as sone as the female findeth them lost, she smelleth their way and runneth after them, and when she is spied of those that haue their yong ones, they let one of them fall, the which shée taketh vp, and carieth it to her repayre, and in the meane time, they escape with the rest, and bring them to their shippes.

Camels they are driuen to pasture toward the East as we doe shéepe.

Wilde Dogs haue handes and fæte almost like men.

In the North part there are marueilous swift beastes, which haue the vpper lippe so long, that when they will fæde they goe backwarde.

The Wolfe before he be sæne, will easely drawe from a man his breath, they couple not with the females, but fiue dayes in the yéere. There are wilde Wolues, which in eating of their pray, if they turne once about, forget their pray, and goe againe to sieke another.

Among the Serpents the Basalicke doeth infect and kil people with his loke.

There are innumerable kindes of others, whereof some haue double heads at both endes, for to cast venime. For the biting of an Aspis, there is no remedy but to cutte that that he hath touched.

The Cocodrils are ingéndred in Nylle, a Riuer of Egypt, which haue foure fæte, the skinne very hard, and they haue no mouing but the vpper lippe, and they make as many egges as Géese, and they haue sharpe clawes for their defence, in the day they remaine on the earth, and the night in the waters, whé they open their throte in slæping, there are little birdes called Trochilos that will picke and clense their téeth, in the which they take great delight.

The Stork doeth shew the maner how to take glisters, for by her nature she filleth her necke with water, and behind with her beacke, maketh infusion into her belly for to clense her.

And many other beastes naturally knowe the herbes that for them are most proper.

The Swallow knoweth howe to finde an herbe called Chelidonia, which serueth for her yong ones, when their eyes are endamaged.

Of little beastes we finde Cities destroyed and people driuen away. In Spayne with Conies. In Thessaly with Moles. In Fraunce with Frogs. In Affricke with Locustes. In the Ile of Ciclados with Rats. In Italy with Serpentes. In Ethiopia with Scorpions.

Hyena is said to be a beast of double nature, Male and Female, they will hearken at the Cottes of shepheards, & learne the proper name that a man is called by, and calling him, when the man is come forth, they will straightway kill him, and they will call Dogges. They are founde in Affrica, which is the cause of so many wilde Asses, that they ingender, the Males doe correcte the yong ones by biting, they will cut the trées along the Riuers, as with a knife, they haue tayles like to fishes.

Déere that are oppressed with Dogges, if they can finde no water for their refuge, then they retire to man: the Female beare eight weekes, and oftentimes two, and for to bring them forth, they séeke secret places, not néere the hye wayes accustomed by men.

The Hinde teacheth her yong ones to runne, to feare, and to leape, the Males that haue left the Females, haue their mussell blacke, when they knowe them selues heauy, they séeke secret places, they will stande still to heare the cry of the Dogs, they runne with the winde, to take away the smell of the trase, they reioyce to heare whistling, and to heare a noyse of singing.

Moreouer the Hart is simple, and all things are to him

marueilous, if that he ſæ a man with a bowe, or a croſſe bowe, he loketh more on them, then on the mã, the Males haue hornes, and in the ſpring time they caſt their hornes, that day that they læſe their hornes, they hide them ſelues as all aſtonied & ſorowfull, as they that haue loſt their armours.

It is ſayde that the right horne can not bee founde, for that they hide them in the ground. At the burning of the hornes, the Serpents flye away: their hornes grow till they be thrée ſcore yéeres old, and the ſaid time paſſed, there commeth vp others like, and thẽ they neuer fall after that: there is no knowledge of their age, but their age is knowẽ, by their téeth, they being without hornes féede in the night and when their hornes beginne to come, they will butte and runne againſt the trées, they liue a hundreth yéeres, they neuer haue the Feuer or Ague, and therefore ſome dames alwayes delight to breake their faſt with Veniſon, by the which meanes they haue lined a hundreth yéeres without hauing the Ague.

Camelion liueth not but by the ayre, and chaungeth his colour according to the thing he toucheth, ſauing white and redde, they ingender in Affrica, and in India.

The Beares doe ioyne with the Females, in the beginning of Winter, not as other foure foted beaſtes doe, for the Male and the Female lye downe embracing, and after that they doe retire in ſundry caues, and the Female doeth bring forth her yong ones within thirty dayes, and moſt cõmonly bringeth fiue, which haue the ſkinne white, deformed without haire, and eyes, and there appeareth but their clawes, in licking of them they are figured.

There is nothing ſo little of man, as to ſæ the Beare bring forth her yong, ſhe hideth her foure monethes, and the Male fourtie dayes, they couche or lye vppon ſoft leaues, and the firſt fourtéene dayes they ſléepe ſo ſoũdly, ỹ you ſhall ſcarce waken them with ſtrokes, then they fatten much, and their fatte or greaſe is conuenable to many

medicines,

medicines, also to keepe haire from sheading.

They being weakened for the most part stande vp, and liue with the licking of their fore fæte, they warme their yong against their breasts, they haue little blod about the heart, and lesse in the body, they haue little eyes, and as feble or weake heads as the Lyon hath strong, therefore they defend their heades with their fore fæte, when they fall and leape from the Rockes, or when they are bayted with Dogges. The Dogges among all other beastes that vnto vs are common, are most faithfull.

We haue true histories of men that haue bene defended from thæues by their Dogges, others haue fought to reuenge their maisters death, and constrained the murtherer to confesse the dæde.

Two hundreth Dogs did rescue by force the king Garamantus, being taken by the hands of his enemies.

Many people haue assembled Dogges together for the warre. We reade of Dogges that haue cast them selues into the fire, when in times past their maisters body haue bene burned.

We reade also of a Dog of Nicomedes the king of Bythinia, to haue almost torne the Quæne in pieces, for that she played familiarly with the king, the Dog thinking it had bene for harme.

A Senatour of Rome, was defended by his Dogge on a night, retourning to his house, from the handes of those, that would haue put him to death.

At Rome a prisoners Dogge would neuer depart from the prison dore, and when his maister was dead, he would eate nothing, and when bread was giuen him he brought it to his maisters mouth. The same Dog was sæne openly to holde vp his maisters body being cast into the Riuer of Tyber. They know their maister, and vnderstand his voyce, aboue all other beastes they doe best knowe a mans voyce, and their names, they doe remember the wayes and iourneyes be they neuer so farre off, and there is none of so

long

long a memorie (except man.) In their chase they haue great diligence, specially houndes.

In India they tie proude Bitches to trées, and the Tygres do couer them, by the which meanes, commeth fierce and cruell Dogges.

The king of Albania did giue to Alexander the great, a Dogge of maruelous highnesse, which would take Lyons and Elephants. The Females haue whelpes three times a yéere lightly, and they carrie them two monethes, they are borne blinde, they can not see till seuen dayes after they be whelped: If she bring but one whelpe, it séeth not till the ninth day, the better whelpe is that that the Bitch bringeth out first, or that that séeth last.

Horses are faithfull, and full of great knowledge, for they knowe their maisters, and they that attende on them. Many are singuler in their doings, the Males liue till fifty yéeres, and the females lesse, at fiue yéeres the males grow no more, and the females but fiue yéeres. Among the beastes they haue least fertilitie.

The most egrest and fiercest Horses, put their nose mussell deepest in the water to drinke, and haue almost as many diseases as men. Asses there hath bene bought for foure hundreth Crownes.

In Acaia they are much requested to haue Mules. They feare colde, the Males are very slowe in their worke, they doe beare as doe Mares, and in thirtie moneths the yong ones are ready to helpe them selues. After they are horsed they must be constrained to runne, or else they would reist the séede by making water.

The females beare all their life, which is thirty yéeres, they be afrayde to wette their féete, and they neuer drinke but in small and shallowe waters, where they are accustomed to drinke drie foted, the Females doe hide themselues when they bring forth, in darke places, that they bee not séene of men, they will not passe the bridges when the Sunne shineth in the water, it is marueil that they runne

not mad for thirſt, for he that dayly chaungeth their water or Riuer accuſtomed to drinke at, muſt conſtraine them perforce to drinke.

The little Mule is ingendred of the Aſſe and of the Mare. The Mules that commeth of a Horſe and of a ſhe Aſſe, are beaſtes full of ſtrength and labour.

The Aſſe that couereth the Mare bringeth forth afore her time, if ſhe before haue retained the horſe, but not elſe, the ſeuenth day the females ſhoulde bée filled, after their foale is borne, the Males fatigated of labour, doeth ſoner repleniſh the Females.

Some of them are not like to their Syres, and the Mule of her nature is barren, ſauing that in Capadocia they beare, by force of drinking wine, often times ẏ Mules ceaſſe from caſting or ſtriking.

The Athenians knowing for a trueth a Mule to haue done ſeruice foureſcore yéers, did ordaine, that in the fields none ſhould deſturbe him, neither in ẏ corne nor otherwiſe.

The Oxen liue twentie yéeres, and the Kine commonly fiftene yéeres, at fiue yéers they haue take their ſtrength: it is ſaid that to waſh them with warme water they will fatten, the ſtrength of the Bull is at thrée yéeres: for to make them drawe, it is good to yoke them with a drawing Oxe, for he will teach the other.

In times paſt among the Romaines, it was eſtéemed as great offence to kill an Oxe, or to ſteale one, (becauſe of their ploughes,) as it was to kill a man.

The Bull requiring combat, ſheweth magnanimitie of courage and gentilitie, he turneth the head, lifteth vp the eares, remaineth on his forefeete, and maketh the duſt to flie with his hinder féete.

At Rome hath bene ſéene an Oxe ſpeake. The Oxe of Egypt hath a kyrnell called Apis vnder his tongue, and a white ſpotte on the right ſide, which groweth as the hornes of the Moone. The nature of ſhéepe is that they liue not aboue nine or tenne yéeres, the Males couple with the Females

males in the middeſt of May, till the middeſt of Auguſt, the Females beare a hundreth and fiftie dayes.

The Ram if the right genitorie be bounde, maketh all Females, and if the left be bound in the ſeaſon, maketh all Males. If ye loke vnder the Tuppe or Rammes tongue, he doeth ingender Lambes of the colour that the vaynes are, if they be of diuers colours, he ingendreth Lambes of diuers ſortes.

Alſo the mutation of waters, doeth vareſie the colour of Lambes, alſo the windes. It is eſteemed not good to cut or gelde Lambes before fiue monethes, and commonly the Females bring forth not aboue foure Lambes.

Goates conceiue commonly two kiddes, and ſometime foure, they beare fiue monethes as doe ſheepe, they become barren with fatneſſe, & they ingender not before the fourth yeere, they conceiue in Nouember, for to bee deliuered in March, when the trées beginne to budde: the Goate feareth cold, euery one of theſe beaſts haue not hornes, but the milke of thoſe that haue no hornes, is fatter then thoſe that haue, and thoſe that haue hornes, their age is knowen by the knots in their horns, they aſpire through the eares, and not by their noſe, and they are neuer without Feuers or Agues, becauſe of the heate of their bodies, which maketh them much ſubiect to lechery, they ſée as well by night as by day, they haue all beardes on their chinne, if one of them be taken or driuen, all the reſt will marueile thereat, if they croppe or bite a yong trée, it dieth, and if they lick an Oliue trée, it will drie away.

Among the ſwine the Sowe doth farrowe two times a yéere, and ſometime they haue twentie Pigges, but they cannot nouriſh ſo many: the tenth day ẏ Pigges haue téeth: in once knowing the Bore they are filled, but they double it for feare not to haue retained.

Some thinke that if they léeſe an eye that they will ſone die, otherwiſe they liue til fiftéene or twenty yéeres, ẏ moſt fatteſt haue leaſt milke, they willingly wallowe in ẏ durt

and myre, and couch most on the left side, they fatten in fiue dayes, they know their maisters house, and defend one another, for if that one cry, all the rest will runne thither.

Among the wilde Boares, the male hath great payne to acquaint him with the Female, and she hath great dolour to make her yong ones: they are borne with teeth, and are blacke.

In Arabia they can not liue, neither wilde nor yet tame.

Apes doe approch much to the sense of man, and their kinde is, to haue no tayles, these kinde of beastes, are much affectioned to their yong ones, they kepe them or holde thē alwayes betwéene their armes or legges, before their breastes, whereby many times they kill them: they haue beard on their chinne. And some in Ethiopia haue tailes, that can liue no where els.

Of Hares there are diuers kindes, in the hie Mountaines, there are white ones, & in Winter they liue with snowe. It is said that a Hare is as olde as there are purgings or voydings in her belly, they haue both kindes, and ingender one with another, and the Hare alone is meate vnto men, beastes and foules, and therefore hée is euer in feare, and goeth more by night then by day.

Conies are of another kinde, the Males haue great desire to eate the yong ones when they are borne, but the Female hideth them, and they make great multiplication.

Many sortes of beastes there are on the earth, that doe mingle one kinde with another.

Among the beasts, Origes haue the haire long alwayes, tending towards the head, and of other beastes the haire tendeth towardes the tayle.

Mice are ingendred on the earth. We reade that when Hanibal had besieged a Towne, a Mouse was sold for two hundreth Crownes, the seller died for famine, & the buyer did escape the hunger. The old Mice are nourished of the yong ones, by great clemencie.

In Affrica there is neither Déere, wilde Boares, Goates,

nor

noꝛ Beares. In other places neither Wolues,noꝛ Foxes. In some places there are no Hares, in other places no Conies. And in other places there is great diuersitie of beastes,that are not in other places.

The Scoꝛpions oꝛ Serpents doe soner hurt strangers, then the Countrey inhabitantes.

The ninth Booke treateth of Water beastes, and of Fishes.

IN the Sea there are many great beastes, aswell as on earth foꝛ the moisture thereof,and because it is moꝛe larger and bigger. Also there is many monsters and diuersitie in many fishes, foꝛ they couple in many kindes, and there is the similitude of all kinde of beastes on the earth,and rather moꝛe.

Whales are the most greatest and grossest beastes in the Sea,there are of two hundꝛeth yardes long. In many places there are rib bones of Whales of twenty yardes.

Alexãder the great was afrayed to mẽte them,least his Nauy should haue perished. In the Sea there are Eeles thꝛée hundꝛeth fote long.

In the night there commeth many fishes out of the Sea, that wil eate the coꝛne in the fields, & after returne againe.

There is in the Sea Mermaides that haue bene seene, and some that haue the shape of men, and their voyce like vnto mens voice, hauing the body of mans shape, and the lower parts scaled like fishes,with a taile.

And there are Wolues, Hoꝛses,Asses,Hogges & other sea beastes,as on the earth. If the fishes aspire and respire as other beastes,there are diuers opinions.

Plinie doeth beleeue that the most part slæpeth & respireth, except those that haue no liuer, and in stæde of blood haue humoꝛ.

The Dolphin is the most swiftest fish in the Sea, and most hardest to be taken: euery one foloweth his like,they

haue yong in ten monethes in Sommer, and nourish them as doe the Whales, the olde ones carry the yong ones, and there is alwayes a great Dolphin, that followeth the little one, they haue the tongue mouing like a Hog.

Aboue the nature of other fishes, they loue yong childrē, and the sounde of Instruments, they liue three hundreth yéeres, and they haue their greatnesse at tenne yeeres, they reioyce when one calleth them Symon, and they loue humaine voyce.

Many examples are both séene and reade of little children, that they haue caried by Sea on their backes and brought backe againe without doing them any harme.

Shell fishes are so great in some places, that with their shelles they couer their houses.

The beastes of the Sea haue diuers clothings, some are couered with leather, and with haire, as the Sea calfe, some onely with leather as the Dolphins, others with great thicke and harde shelles, other softer shelles, as Oysters, Cockles, and Muscles, that haue no heads, others with sharpe prickles, as the Ecchinus called the Sea Porcupen, others with scales, as Carpes and many other fish, others with rough skinnes with the which they shaue fine wood and Ivory, some with soft skinnes, and others that haue none.

The Sea calfe which is clothed with skinne and haire, they ioyne Male and Female together as Dogges, and they neuer haue but two at a burthen, they nourish their yong ones with their pappes or tettes, and are deliuered on the lande, and within twelue dayes after they bring thē to the Sea.

The Sea calfe, is more grieued and more constrained to slēpe then any other beast, and therfore their skinne put on a mans head, doeth prouoke him to slēpe.

Great is the diuersitie of beastes, in some there is neither bone nor thorne, and of many kindes there is no male.

Among the fishes the Females are greater then the Males,

Males, there are some that haue their scales tending towards their heads, cleane cõtrarie to the nature of others.

Some there are that goe alwayes to sleepe vpon the drie lande.

The Whale maketh her yong ones aliue without egs.

Eeles liue commõly eight yeere, they will liue six daies without water, specially when the winde is at West, and lesse with other windes.

In Winter they couet deepe and cleare waters, and swimme in the bottome, they fede in the night, and they of all other fishes, flote not aboue water when that they are dead. In the Lake of Verone they are taken by thousandes. Some kinde of fishes rendreth their yong ones aliue, others that lye by the Sea, as the Sea swallowe.

Some make egges and couer or sit on them, as doe the foules in the ayre, so doeth the Sea kite, a foule called Lucerna, of the propertie of his name, seeketh ẏ maine Seas, whose tongue shineth or glistereth, as may well be seene in a faire and calme night.

The Dragon of the Sea, as sone as she is taken and brought to land, she maketh incõtinently an entery or hole in the sande, that shee might be lost. Some fishes haue no blood, and haue their heads in their bellies betweene their feete, & with their feete they cast meate into their mouths.

The Sea Locusts hide them selues for the space of fiue monethes, and swimme in the spring time, they battaile betweene themselues with their hornes.

If they be put aliue into hote water for to seeth, they will be tender.

The Sea Crenices liue in Rockes and stony places, & there are very great ones.

In Sommer and in the Spring they fatten, and in the full Mone, and they augment & diminish with the Mone, they are of a long life, & they haue all eight feete. The Females haue the first foote folded or double, and the Males single, and they creepe as much backward as forward.

Cockles

Cockles haue two little hornes wherewith they fæle the way, for they haue no eyes.

The fishes ioyne Male and Female, ioyning their bellies, then the female rũneth or swimmeth away, touching with her mussell the belly of the Male, and the Males eate the Females Egges, for if all the Egges should profite, the Sea, Riuers, and Pondes, would be filled with fish, there would be such an innumerable multitude.

The Sea Mouse maketh her Egges on the lande, and couereth them with earth, and thirtie dayes after doeth vncouer them, and bringeth her yong ones into the Sea.

Some fish liue three score yeere, as by the experience of markes put on them. Some fishes there are that liue on the lande, when that in Sommer, the Riuers and pondes are dried vp, and some will goe fæde in the corne, and on the lande, tarying for the water, and such is the nature of some, to liue on the earth with wormes.

There are certaine fishes with sharpe prickles on their backes, that will cut the line of fishers Nettes.

Other fishes that are called Sea starres, doe burne other fishes by their great heate.

In the Sea there is warre among the fishes as among the foule in the aire, for one feedeth not with another.

The tenth Booke treateth of the Foules of the Ayre.

IN Affrica and Ethiopia, there are birdes that are called Struthiocameli, as hie as a man on horsebacke, which doe not forsake the earth, but runne faster then horses.

The Phenix liueth in Arabia, I say not that hee is alone, but neuer man sawe him eate, he liueth fiue hundreth yeeres, and in his age maketh a Nest of the braunches of spice trees, wherein he dieth, and of his bones commeth a worme, the which afterwarde naturally becommeth a Phenix. He is as great as an Eagle, the feathers about his

his necke are of the colour of golde, the taile yellowe, and the surplus like to Azure.

Eagles there are of sixe kindes, some liue with their pray on the earth, other in the water, that fishe with one foote, they haue the knowledge to take Whelkes, and other shelled fish vp into the ayre, & then let them fall, to breake their shelles, for to haue the fish, they cause their yong ones to loke vp into the Sunne beames, and cast those out of the Neast that will not beholde the Sunne, as bastards: they die in their age, because that their vpper bill doth growe so long that they can not eate, they fight against Deere and against the Dragons, and in flying they cast dust that they take vp on the lande, in the eyes of Crowes & other beastes for to blinde them.

The Cuckoe resembleth to ỹ colour of the wood Doue, they are killed of others of their kinde, they change their voyce, and come in the spring time, and doe alwayes bring vp their yong ones in other birdes nestes, specially in the nestes of stock Doues, she neuer lightly maketh aboue one egge, and very seldome two, because she knoweth that shee is hated of all other birdes. They thinke them selues very fayre, and dispraise others, and there is no flesh sweeter thē theirs.

The Kite is alwayes a reuenging foule: it seemeth by the remouing of their taile, that they that haue learned to guide or gouerne the ships by the Helme, haue learned by her. Crowes will breake or cracke nuttes, with often letting them fall in flying.

The Rauens ingender by the mouth, as some suppose, as doe Doues: it is an euill token or signe when that they cry as though they were choked.

The night Owles doe defend them selues from other foules, with their bill and clawes, because they are hated they flye in the night, in winter they sleepe two monethes, and they haue nine maner of voyces.

Among the flying beasts, some haue fingers and nailes,

and other flatte & brode feete, as Geese, Duckes, Swannes, and others liuing for the most part in the waters.

The proud Pecocke spreadeth abrode his feathers, specially against the Sunne, to make them shine, & then putteth them down together: his taile shedeth as the leaues on trees, and commeth againe with the spring, when he hath no taile, he doeth hyde him selfe as ashamed, at three yeres his tayle beginneth to colour, and liueth xxv. yeres, his feete are fowle, and his voyce fearefull.

The Cocke knoweth the starres, & when the day dawneth he riseth, and goeth to rest when the Sunne is sette, by his crowing hee giueth warning of the houres in the night, and waketh those that goe to their labour, he is king of beasts that are in ỳ house of his bignesse, & fighteth with his spurres: if he haue the masterie, he will sing or crow, if hee be vanquished, hee hydeth him selfe: hee is stoute in his going, and maketh the Lyon afrayde: hee beholdeth the Sunne more then any other birde: if he be kerued or gelded, he will not crowe, being kerued he will sone ware fatte. The Gose kepeth ỳ Romains Capitol, it hath bene recited of a Gose that hath followed his maister from Swecia, to Rome: their feathers are pluckt twice a yeere, with Gose grease is made many good oyntments.

Cranes they flie hie, they doe elect one whome they followe, there are among them Sergeantes, which make thē keepe order in their assemblies, in the night they sleepe the head vnder their wing, and one legge vnder their feathers, and sustaine them selues with the other. Those that are appointed to make watche, holde a stone in one of their clawes, for to waken those that sleepe, when he letteth the stone fall into the water.

The Storkes goe their wayes in the Sommer, and none knoweth whether, nor from whence they come, aswel as Cranes, the one commeth in Sommer, and the other in winter, they assemble for to take their flight, but no man euer sawe their congregatiōs, for that is done in the night,

without

without noyſe. They aſſemble in Aſia at a certaine day, & he that is laſt come, is killed and torne in pieces, and then they take their flight. The Swannes eate Serpents, and therefore there is as great paine to kill them, as to kill a man, the yong ones doe nouriſh the olde.

The Quailes come by night, and in daunger of mariners when they approche the lande, becauſe of their great multitude. In time of raine, or of a great winde, they neuer paſſe the Seas, in winter they caſt their feathers, ſo doeth the Turtle.

Swalowes liue with fleſh, they are ſo ſwift, and turne ſo ſuddainly, that no other foules can get them for to feede on, and they will feede in flying.

Swallowes tarie but halfe a yeere, ſome chaunge their voyces, and their feathers mount euery yeere. The Jay loueth to ſteale Gold and Siluer. In ſome places there are no Partriges. In Rhodes there are no Eagles.

At Rome in the houſe of Hercules, there entreth neither Dogge, nor flyes.

And ſo it is, that in many places there is great diuerſitie of birdes.

Along the Sea coaſtes in ſome places there are birdes that liue with fiſh, and euery one of them maketh ſeuen Neſtes, and in euery Neſt yong ones, but their Neſtes are ſo harde, that they can ſcarce be broken, and there is no way into the Neſtes but one little hole for the Dame to come in and out, and their Neſtes are of Thornes, that are ranged one againſt another, with earth and feathers, and they are ſeldome ſeene. There are Swallowes of diuers kindes, there are ſome called Marlions ý make their neſts ſir foote in the ground. Birdes haue marueilous great induſtrie, and knowledge in making their Neſtes, with feathers, earth, and chaffe, haire, woll, moſſe, and ſuch like.

Alſo they carry water to temper it, and to fortifie it, by the which meanes their yong ones are ſure and ſafe againſt the raine, the dames doe clenſe and make cleane the neſtes

from ordure, when their little ones are yong, and when they become great, they force them to come forth of their nestes for to be cleane.

And in India, some foules seeke Hares skinnes to make their nestes.

The Partridge so maketh her nest, that the wilde beastes can not finde them, and where she layeth her Egs she hatcheth not her yong, fearing that her oft frequentation should be knowen.

The Female for the intemperancie of lust of the Male, seeketh to deceiue him, because if she be vpon the nest, hee will breake her Egges. The Males doe fight, for the Females. At the cry or singing of the Female, the Male runneth so blinded, that he will sometimes strike against the foulers head, he is so much subiect to imbicilitie, more then any other birde.

The Female when she heareth any approch her yong ones, she faineth to haue her winges broken, that shee can not flye, and cryeth that she may be heard, for to retire the people and Dogges, to the ende they finde not their nestes, and she flyeth a farre of from her little ones, and they liue, by common estimation, till sixtene yéeres.

The Doues are chaste and leaue not their dwelling or remaining place, if they are not without makes, they doe suspect adulterie: by this meanes they quarrell with their throte, and fight with their bill, thē they flatter with their féete. The Male is as carefull toward the yong ones, as the Female: at the first they bring their yong of the salt of the earth, for to temper their appetite, and they conceiue by the bill. The Pigeons and Turtles drinke as doe horses, without often pulling their bill out of the water when they drinke: they liue about eight yéeres, but the wilde Doues liue thirtie yéeres.

The Sparrow liueth not aboue a yéere, and the Female liueth somewhat more, because of the frequentation that they haue together.

Birdes flie in diuers kindes, some go, some leape, some runne, and some cast their fæte forewarde before they flye, as Cranes and Storkes, and there are none but Drakes, that flye bolt vpward at the first leape, others aduance thē before they flye. Some haue no fæte, and haue no rest but in their nest.

Hennes haue vnderstanding, and when they haue laide an Egge, they cackle and make a noyse.

The Cardnelis doth those things, that shée is commanded.

The Popingay can speake humaine speach, they come from the Indians, they haue their head as hard as their bill, they liue most commonly with Acornes, and they speake best that haue fiue clawes on their fæte, they are taught secretly where as there is no other noyses but the teachers.

Crowes haue bene séene speake, and call noble men by their names, specially one in Rome, which by that meanes was solemnely buried.

It is easier to tame a Lyon, an Eliphant, or any other great beast or foule, then to tame a Mouse or a Swallow.

Strabo was the first that did cage birdes, which before had libertie in the Sky: he taught the way to fatten Capons, with meale and milke.

Among the birdes many haue foure fæte, and some lay many egges, some foure, and some two. They ioyne together in two maners, the Cranes, with their height. And Hennes and other Females the Cockes tread them down. Some egges, and the most part are white, others coloured, and others red, as the egges of Fesantes: and all kinde of egges within are of two colours, white and red.

Egges of fishes are round, and they haue no white, the Egges of feathered foules liuing on the water are rounde, and of others long: the yong ones come out of the shell at the round ende.

Horace saith that the longest egs haue the best sauour, & that Hen is best and most tenderest, that laieth round egs.

Some birdes ingender at all times, as Hennes that lay euery day an egge, some two at a time, and some so many that therewith they dye.

In some places Doues ingender ten times in a yere.

In Egypt the Turtle twice a yer, and other birdes but once a yere.

As touching Egges, there is a red droppe in the middest of the yolke, the which maketh the birdes harte, and it is the first formed, and of the white is formed the body, and within the Egge the head is greater then the body, and lieth with the surplus of the yolke: the twenty day he hath life and crieth within the Egge, and then the feathers beginne to come.

The yong one in the Egge lieth after this sort, it hath the head vnder the right foote, and the right wing vpon the head, and they growe on their fete, contrary to the nature of other beastes.

Ye ought not to giue a Henne aboue xxb. Egges to coue on, and those Chickens that are hatched about the beginning of the yere, are the best.

For to sette Hennes to brode, take egges of ten dayes olde, for they are better then older, or more fresher, and ye ought to put odde: when the Henne hath coued foure dayes, in loking on them in the Sunne, ye shall knowe whether they be good or no, or in puting them in warme water, for the good Egge will sinke to the bottome, and those that are putrified and naught, will flotte and swimme. If the eggs are neuer so little craised ỳ are sette, they wil neuer proue.

It is best to set Hennes to coue in the newe Mone, for if they are set in the wane of the Mone, or at the full, they will profite little. When the weather is hote, Chickens will come within one and twenty dayes, and if it be colde, not til fiue and twenty dayes. If it thunder the egs that are coued wil be lost, & also at the voice of the Kite or Puttock.

The remedy against the thunder, is to put a naile in the Hennes nest, or els of the earth of a Cart whele.

It hath bene recited of a Cock, which after the Hennes death hath atchieued couing, and by this meanes to ceasse from crowing.

The Ducke meruaileth at the first to sée her Ducklins, but after most carefully she calleth them together, and lamenteth if she sée them drowned in the water, and some there are that can make Chickens come in warme water, as well as if the Egge were coued.

The pip commeth lightly vnto pullaine, betweene harueſt and the vintage: for a remedy therefore, it is good to let them hunger, and to giue them little meate, or to giue them to eate Garlike and butter.

Doues they lay two egges, and if they lay thrée they will hatche but twaine, they bring forth a Male and a Female, the Male first, and two dayes after the Female.

The Male is hatched in the day time, and the Female in the night, the yong Pigeons come forth of the shell twēty dayes after they are hatched, and the Female layeth egges within fiue dayes after that she hath knowen the Male. In sommer oftentimes they haue yong ones thrice in two monethes, for if the weather be hote, they conceiue in eightene dayes, and therefore in the nest is found many times egges and yong ones. And Pigeons conceiue at fiue moneths.

The Peacock at the age of thrée yéers bringeth forth yōg ones, the first yéere one, & euery yéere after she increaseth, the Male breaketh the egs to haue the Female at his pleasure, & therefore she hideth her egs, and for one Male, shée hath fiue Females: in thirty dayes shée bringeth forth her yong ones. Géese conceiue in the water, they make their egs in the Spring: it is necessary to giue them nine or eleuen egs to coue, at xxv. or xxx. dayes they are hatched, commonly Swannes or such like, coue thirty dayes, the female Crowe alone coueth, and the Male fēdeth her in the nest.

The Bat hath the members and wings as feathers, she bringeth two yōg ones, the which she nourisheth with the milke

milke of her breasts.

Vipers do winde one about another in conceiuing, that they seeme to be but one Serpent, & the Female conceiueth by sucking the Males head, which shee putteth into hers.

Some Serpentes make her egges on the grounde, and then couereth them with earth, and the next yeere after bringeth forth their yong ones.

Men are more proner to lust and fornication in Winter then in Sommer, and women more in Sommer then in Winter.

Beastes haue societie, and knowe when the Female will haue the Male.

Among the foure foted beastes, their smelling bringeth the operation of lecherie.

The greater the beastes are, the fewer yong they bring forth, and the longer they beare them.

All beastes are replenished with the Male at one time though they bring neuer so many, and the yong ones lie in the females belly the ioyntes or knees against the belly.

But a yong Childe in the mothers Wombe hath his face betweene his knees, and is like a Citie.

Rattes and Mice doe ingender by licking one another, and it hath bene seen that one hath made six score, so it commeth to passe that by this meanes there are so many both in the fieldes, and in mens houses.

The Salamander in touching the fire doeth quench it as if it were Yse, and notwithstanding that she casteth by the mouth, which is like milke, if it touch any part of a man, the haire of his skinne will fall away, they grow as the Eagle in the water, and among them there is neither Male nor Female, and they neuer conceiue nor make egges nor yet haue yong.

Mans sense is perfect, but in seeing, the Eagle doth surmount him.

The Vulture to smell, and the Mole to heare, what soeuer is on the earth.

Fishes

Fiſhes doeth both ſmell and ſée, and yet haue neither eare nor hole in the head.

Some fiſhes get their pray with their téeth, others with their féete, and others with ſucking and licking according to their nature.

Some liue by ſucking of venime, as Serpentes, and Spiders, that haue neither blod nor heate, nor ſweate, and to them nédeth no meates.

Wolues doe often times liue with earth.

Beaſtes doe fatten with drinking, and therefore ſalt for them is neceſſary.

Thoſe beaſtes that haue their téeth cloſe, doe lappe as Dogges in their drinking, and they that holde their téeth together doe ſowpe hume as doe Oxen and Horſes.

The Beare in drinking ſéemeth to bite the water.

In Affrica wilde beaſtes drinke not in the Sommer for default of water, and there are certaine beaſtes that neuer drinke, and yet they haue alwayes thirſt within the body.

There is that haue a bladder full of liquor, in drinking thereof one ſhall endure long without thirſt.

Birdes haue both amitie and warre amõg them ſelues as well as beaſtes on the earth.

One robbeth from the other their neſtes, yong ones, Egges and meate.

All beaſtes hauing hart will ſléepe, both on the earth and in the water.

A childe newe borne (to let him ſléepe long) is to him nouriſhment, as he growes to age he ſléepeth leſſe, and yong children dreame in their ſléeping.

The eleuenth Booke treateth of little Beastes.

NAture hath made more meruailes, and hath giuen more sense and vnderstanding to little beasts, worthy of more greather memorie then the great. They haue no blod, but in stede of blod haue humiditie and moisture in the body, which maketh them giue both sound and voyce, to aspire and respire, they haue neither heart nor liuer, but only certaine bowels, and haue eyes & other sentemēts and fælings, their head moueth not without the body, vnlesse it be pulled off.

Among the which, the god flies or hony Bées haue sense, and labour for the publike profite, they haue among them Princes, and conductours of their counsell, and maner how to behaue them selues in their frequentations. In the winter they are hidde, for that they can not resist the Snowes, windes, and frostes, they make hony and ware, when they goe to their worke they neuer lese no time.

First they wype or rubbe their Hiue with things that are bitter, as the Gumme of trées, and other things for to take the taste from other beastes of the swéetnesse of their hony: afterward they make their chambers or dwellings, then they make their yong ones without corruption, and after that they make their hony and ware, of floures, and prouide fode for winter, otherwise bitter meate full of humor seperated from hony.

On nights in their voyage, when they are from their wonted place to rest, they lye their belly vpward, to kéepe their wings from the dewe. The maner of their workes is to remaine some of them at the gate or dore of their Hyue there to kéepe watch, as the custome is of a Castle: in the night they rest till the morning, except those that are appointed to watch, of the which one of them in the morning goeth about making a sound or noyse, as it were a Trũpet,

and

and then euery one departeth and flieth away if the day be faire, otherwise they continue in their house, & they knowe the disposition of times, the yong ones goe or flie abroade into the fieldes, & the old ones remaine to make the worke, or to deuide the romes within. Some bring the flowers to the entrie of their place, others doe discharge it, & carieth it in, others bring water in their throte for to temper or giue moisture to their workes, and they deuide their offices.

Some do garnish, some pollishe, some sucke, and others make ready fode of that which is brought in, for they liue together, and doe not seperate, to the end, that equally their fode be deuided: they make double alleyes or pathes, some to come in at, and some to goe forth by: the most hony is in the highest rome.

If there chaunce to rise a great winde whyleft they are in the fieldes, then they flie close to the grounde along the hedges, and they take a little stone or earth to bée more waightier, to the ende the winde beare them not away, and lode ther floures in their fore féete against their breastes.

Those that are appointed maisters or ouerséers of their house, will chastice those that are negligent and slow.

They neuer file nor make filth in their Hiue they are so cleane. In the night their watch being set, they retire into their lodging, and make a murmuring or noyse, still diminishing till that one maketh the last sound or Trúpet, flying in the midst of them, and then they ceasse off all till the morning. First they make their common houses, and then the house of their king or Captaine whome they doe elect and chose.

Among these good flyes, there are others more greater without sting, which serue at the workes, and to chafe or warme the yong ones betwéene their féete, and they are straightly corrected, and if they faile, without any remissiõ.

These make their king a faire house, pinacled like a Castle, seperated from other houses.

The lodgings of the cõmon sort, haue six rowmes or co-

ners for the worke of their fine feete, and they make them in close, darke, or raynie dayes, and at such times they fill the vpper Celles with hony, and in a faire and cleere day, they goe to the fieldes.

The maner how the yong ones are borne, there is great difficultie, for they neuer couer one another. There was a Romaine that made a hiue of cleere lanterne hornes for to see their works, & it seemeth that they make little wormes, that become flyes, and before that they haue feathers, there is nothing that the dame desireth more to eate, when their heads are pulled of.

Their king is chosen in euery swarme or company, and they chose him that is greatest: he is knowen, for he hath a spot in the forehead. If he goe or flye to the fieldes: the others followe him as his garde, and he goeth not out of the Hiue, vnlesse that all the rest doe followe.

If he haue a wing broken or perished, hee goeth not out of the Hiue, he onely taketh no paines, but admonisheth them of their worke. If by aduise of counsell he commeth forth, euery one putteth their paine to serue him, and will carry him if he be wearie. If he haue a sting, yet he vseth it not. When they intend to depart and leaue the hiue, certaine dayes before, they murmure and make a noyse, and flye their way by tempests.

Oftentimes they be at strife for their bondes & floures, or if one Hiue haue no foode, they will spoyle another, and their king doth defende them.

If there wante victailes, they kill or driue away those flyes that haue no sting. If their sting be once broken, they are tamed or faint hearted, as a gelded body, and can profite no more, such haue places a part for to retire them.

They hate sheepe, for they can scarce get out of their woll. Also they hate Crabbs or Creuices, and if there be any sodden neere to their place, the smell of them will make them die.

They haue many diseases, and if any of them die, they

bring

bring him out of their rowmes, and cast him out of their Hiue as making of funeralles.

If their King die, they do more, for then they make such dolor and sorowe, that they doe nothing. By this and by to much taking off of their hony, they die often times.

They haue sense and vnderstanding to heare, and doe reioyce, and at the sound of a Basan they will assemble.

When their worke is finished they flie abroade, then returne to their Hyue or house. Their age is seuen yéeres, they neuer touch any Carion, as Crowes Kites, and other flyes doe. Their hony commeth as it were a sweate from heauen, spittle from the starres, or liquor from the ayre, when in the spring time the saide moisture falleth on the leaues and the Dew, and the Bées receiueth it, and carieth it into their Hyue.

The hony at ỳ first is as cleare as water, it boyleth like newe wine, and purgeth, the twentie day it fatteneth, then it hardneth, and casteth a little skinne like a scumme, there is wayes how to get the hony, for want of foode causeth the Bées to disperse and flye their wayes, or die, and to great abundance maketh them vnprofitable, for they labour no more then is necessary or néedefull, & therefore the twelfth part is their portion that they ought to leaue them.

Of hony is made many medicinable things, seruing to eche one. Some leaue the tenth part, and if it be not full but almost emptie, ye ought not to touch it.

That hony that cleaueth together or thréedeth, is not good, but when incontinently it breaketh in taking of it, it is a good signe.

Also the good smelling hony that hath a colour like gold, and swéete in the tast, is a signe of goodnesse. The wilde hony is not so good as the other.

Spiders or Spinners haue within them such fertilitie, that they spinne beginning in the middest, and they make thréedes very subtill. They make their yong ones like wormes.

Scorpions towards the East are very venemous, and they make little wormes like Egges, of which commeth their yong ones, but in Italy they doe little harme. They byte or sting with their tayle.

Locustes or Grashoppers make egges, they goe on the ground with their clawes. The Parthians do eate them.

Also Ants make egges, of the which growe their yong ones: and as the good flyes doe congregate their workes, so they hide their foode in ỹ earth, for to liue with in the winter. They haue knowledge how to deuide ỹ great graine Acorne, and they drye them that are wet in the Sommer, they worke by night in the full Mone, one commeth to an other for their burthens, and it semeth that in them is mutuall loue in the diligence of their worke.

Among other beasts they burie one another when they are dead.

The Butterflie commeth of a little worme in three dayes, she groweth also of wood wherein is humiditie.

There are beastes full of blood that die so sone as they are full, for behinde they haue no issue, they are ingendred vnder Oxen, and some time on Dogges.

In Cypres there growe in the furnaces, of flies great flying flies, called Piralis or Piransta, that die when they are out of the fire. And some there are called Hemorobios, that die that day that they take life. Dead flies if they be hidden or buried in ashes, will reuiue. All beastes haue their hornes hollow sauing at the very end, except the Dære.

Asses in India haue one horne. Pã alone hath his eares vnmoueable. Hares sleepe with their eyes opẽ, so do many men which the Greekes call Corybantia.

The eyes of yong Swallowes will come againe, if they be pulled out.

The eyes of man principally doth shewe loue, furor, folly, and wisedome.

Great eyes signifie small witte or discretion. The heart liueth first, and dieth last.

A man

A man hath eight ribbes on a ſide, the Hog ten, the Serpent thirtie. Among foules the Batte hath tæth and no other. Man groweth till he be xxi. yæres olde. Blood preſerueth the life of euery perſon: that being gone: no remedy but death. They that haue the thickeſt and fatteſt blood, are the ſtrongeſt. They that haue it moſt fine and cleare, are the wiſeſt. They that haue leaſt are fearefull.

The blood of an Aſſe is moſt fatteſt. The blood of a Bull will ſone ware hard. The blood of Dæere and Goates is not thicke nor hardneth not.

Man alone will chaunge his colour euen in a moment. The man that is hairie, is inclined to fleſhly luſt.

If a mãs haire doth not grow nor his beard, it is a ſigne that he is barrẽ, ſo is the woman ỹ hath no haire growing on her body.

The haire of a mans beard commeth not as the graſſe in the field that is mowed, but it proceedeth from the rote.

There is no Male that hath any appearance of breaſtes but man: a woman hath two in her ſtomacke, the Cowe hath foure in her belly, Goates & Sheepe two, the Sowes ten, and ſome twelue. Euery Pigge knoweth the dugge that they haue bene nouriſhed with.

Whales, and Sea calues nouriſh their yong ones with milke of their breaſtes.

A womans milke is vnprofitable before the ſeuen moneths. A Cowe hath no milke before ſhée hath had a calfe. The Aſſe hath milke when ſhe beginneth to beare. And to let the yõg Aſſe take the dammes milke before two dayes, is daungerous.

Certaine Dames of Rome did bathe thẽ-ſelues in Aſſes milke, for it maketh their ſkinne ſmoth and wh ite.

Milke of Goates is worſe to make chéeſe thẽ the milke of Kyne. The milke of beaſts hauing aboue foure breaſts, is vnprofitable to make chéeſe, and that of two breaſtes is better.

The chiefeſt and beſt chéeſes are made in Italy.

Zoroaſtes

Zoroastes liued twentie yeeres with cheese without feeling age.

Man hath two feete of one length and measure, and two armes with two handes. The thombe and the little finger are of one measure, the other two also of a measure, & that in the middest is longer. Euery finger hath three ioynts, and they shut or bowe inward & not outwarde, the thombe hath but two that bowe in like maner.

The Ape is the beast that most approcheth the fashion of feete, hands, nose, and eares to man, for with the forefeete he fedeth, and hath the bowels like to mans.

At three yeeres man hath taken halfe his growth of height. Ye hath the knees and armes contrary in bowing, the one forwarde the other backwarde.

Beastes that ingender their like, bowe their knees backwarde, and those that make egges, forewarde. Nailes growe vnto eche one, yea vnto dead men as well as their beardes.

Birdes that haue clawes and one at the heele, stretche their feete toward their tayle in flying.

All beastes haue feete in number equall. Flyes haue sixe and so haue Locustes or Grashoppers that leape, because that their hinder feete are long.

The genitors of Wolues, Fores, and Rammes are of bone. Boores haue them ioyning, and Shepe haue them hanging.

The tale of fishes serueth to conduct them, & so it doeth to other beastes, and all haue tayles except man and the Ape. Those beastes haue voyce that haue lunges and arteiers. Others make but a sounde or noyse, and murmure inwarde.

A Childe neuer rendreth voyce till he be wholly out of the mothers wombe. They that sonest speake latest goe.

The voyces of men are diuers, as well as their similitudes and likenesse, and we vnderstand them before we see them. The voyce of men is more grauer then the voyce of

women. Members that growe out of time are vnprofitable, as the firt finger.

There was one that had two eyes behind the head, but he sawe nothing. It is a vaine thing saieth Aristotle to iudge any person by signes. Often-times commeth iudgements of short life, that is to wit, few teeth, very long fingers, colour like to lead, and other things.

The contrary signes of long life is to croke the shoulders, on one hand two strikes alõg, to haue more then xxxy. teeth, great eares.

Great fore heads signifieth a stoute and manly courage, little forehead, lightnesse, a round forehead, wrath. If the browes be straight it signifieth imbecilitie. If they bende towards the nose, hastinesse. If they bende towards the cheekes, signifieth a mocking person. If they bende wholy toward the eyes, malice and envy. Long eyes signifie malice. The greatnesse of the eares signifieth a foolish babler. The breath of a Beare is naught, and worse a Lions.

The Serpent flieth the breath of the Elephant, and the burning of Hartes horne.

The hony Bees oyle being cast on them, dye. The Scithians in their warres, temper their Dartes heads in humaine blood, and in Vipers poyson, and if they strike any therewith, there is no remedy but death.

The best foode for man is to eate but of one meate at one time or meale, the accumulating of sauours is pestiferous, and Wine maketh a smelling or stinking breath, if it bee not tempered. With great difficultie shall a man digest that which is taken grædely, excessiuely, or hastily.

There is more paine in the stomacke to digest in Sommer, then in Winter, and in age more then in youth.

The vomitings that are made after excesse, maketh the body colde, are hurtfull to the eyes and teeth.

A mans body groweth and wareth grosse, to vse swéete things, fatte meates, and good drinkes. A man may easely liue seuen dayes without drinke.

Butter allwageth hunger and thirſt: neuertheleſſe things excelliuely taken are hurtfull, & therefore it is good to deminiſh that away which hurteth.

The twelfth Booke treateth of ſweete ſmelling Trees.

TRées haue life which they take of the earth. There are many ſtraunge trées in diuers countreies, which vnto ſome are vnknowen.

In ſome places they water fine trées at the foote with wine, the which profiteth much the rootes.

The Parthians which haue trées bearing woll, of the which is made fine Cottõ cloth, as it is ſaid, haue a trée bearing Apples, but ỹ fruit is not to bée eaten, but they haue a meruailous ſmell, ſo haue the barkes, the which being in your Cheſt among your apparell, caſteth a ſwéete ſauour or ſmell: and this trée hath alwayes fruite, ſome growing, ſome dying, and ſome ready to gather, and the graftes of this trée will take in no other countrey.

In India there is both wood & trées that will not burne in the fire. There hath alſo béene ſéene a Figge trée of a great height, the braunches of the ſame trée to ſpreade ſixty paces, and it hath leaues ſo brode, that the Sunne beames can not by any meanes enter betwéene, and therefore the fruite of this trée can not dye, but the ſhadowe of the ſame is very delectable.

There is alſo in the Indias, Apple trées which haue the leaues thrée cubites long, and two brode, bearing ſuch great fruit, that foure men can ſcarce eate one Apple. The trées name is Pala, the Apples name Aripa.

Pepper groweth on little trées as doeth Jenuper.

In the Indias it is ſometimes mingled with Jenuper berries of that Countrey, which haue ſome ſtrength, but no ſuch taſte: it groweth almoſt white, but for to laſt it is dryed in the ſmoke, which cauſeth it to be blacke, and with the

the shrubbes of the same tree dryed in the Sunne, is made long Pepper.

There are other trees which in the morning after the dewe, rendereth a certaine kinde of hony.

In Arabia there are trees which neuer cast their leaues. Others that haue their floures, that beginneth in the morning at the Sunne rising to open, and at hye none they are opened, & after none they beginne to close, and so remaine all night till the morning, and the Paysauntes of that countrey say that the tree sleepeth.

There is the tree of Nardas, the which casteth a meruailous sweete smell or odour.

And in Arabia of Trees growe Frankencense, and Myrre. Frankensence groweth in a Forrest of Arabia, in a fruitfull grounde, full of Fountaines pertaining to diuers persons.

It is a hanging matter among them to steale any thing.

The men do purifie them-selues, and abstaine from women for a certaine space, to take or gather the Frankensence, otherwise they can not profite.

On this side the Sea it is mingled with a kinde of Rosen which is like, but the difference is knowen by the colour, by the breaking, and by the fire, for Frankensence will soner burne, and is soner broken with your teeth.

Also there is in those woodes of Arabia, trees bearing Myrre, and the Mastick.

The Sabians burne no other wood, wherefore they are weary of their smell.

In the Sea of Arabia groweth the Margets and other precious stones.

Synamon is the barke of a little tree, which groweth in great quantitie in base Ethiopia, in sul places among the bushes, the best is that of the highest branches, the worst is that that is neareste to the rote. When there is any dewe in the Sommer it is gathered by great difficultie.

The tree hath no smell whē it is greene, & it is gathered

from the Sunne rising, to the Sunne setting.

The shippes remaine sixe monethes for their fraught. That that is caried into this countrey of Ethiopia to sell them, is Glasses, vessels of Copper, and Brasse, Wollen cloth, and Linnen.

The worst barke or pelle, is that that is soft and white.

Baulme groweth onely in the province of Iuda, in two Gardens of the Kings, the one cõtaining about ten Akers, the other lesse, and it commeth of little trees not foure foote long, growing after the maner of a Vine, it resembleth and is neare to the taste of Wine, red in colour and fatte, the fruite is cutte with a knife of glasse, stone, or bone, for the braunche dieth to be cut with Iron, and it is cutte to take away the superfluities, then in the season the barke is onely cutte, and then commeth out the sweate by small droppes. This experience is true, that if any of it be spilt vpon any apparell, it will neuer staine.

There is daunger in Wormes, for they will marre the trée. Alexander the great in a Sommers day filled a little Viall of one trée.

Ginger groweth in the earth, and is rootes.

The thirteenth Booke treateth of straunge trees.

THe sweete oyntments, perfumes, and smellings, are made of these trées. Some for the pleasure of others buye them deare, for they that carry them, haue not the smell & pleasure, but it is for the smell of others, which is great vanitie.

Palmes are in diuers kindes, and there are none fruitfull but toward the East, for they make wines: and as in trées and leaues there are Male and Female, so there is also in these.

The Male buddeth within the roote, and the Female outwarde.

They

They beare euery yéere Apples, and when the trée is cut the rote calleth againe.

The Cedar groweth in Siria, of which commeth the soueraigne rote. That that flourisheth beareth no fruite, & that that fructifieth beareth no flowre, and the wood lasteth perpetually.

The Figge trées in Egypt are like to Mulbery trées, the fruite commeth foure times a yéere, against the woode and not against the braunches.

There are many vnknowen trées, specially those that haue the good Gum. There are made Cordes or Ropes of this trée.

At Rome haue béene founde bookes of Philosophie in a Sepulchre betwéene two stones couered with Cedar wood that had laine there fiue hundreth thirtie fiue yéeres without harme, for the Cedar neuer rotteth, and there is no wood so good to make workes.

There are Cedar trées so hie, that ye can not sée the toppes, and so great that there was presented to Tiberius Cæsar, a table that was foure foote large, & sixty foote long.

Lotten or Celtis is a trée in Affrica, the fruite of which is so swéete that it healeth all paines in the belly, and out of that fruite being bruised or prest, commeth wine that will not continue aboue ten dayes.

Pomegranets there are of diuers kindes, swéete, sower, and winish. The pell of the sower ones, are good and best to tanne skinnes, and the floures are good for Dyars.

The Thorn that is called Royal, groweth in one day, and kepeth wyne from being naught.

Citisus is a singular trée, the wood is good to all beastes, as well Shéepe as others. If it be sodden in water, it renders to Nources that drinke it, plenty of milke, and maketh the childzen more sure and more greater, and maketh Hennes to lay egges. Vpon the floure of this trée a flye will neuer sitte.

Many other straunge trées there are in the Sea, that

will breake like glasse, & others that are as hard as stones, and many other trées that are in the Ilandes of the Sea, which we haue not here, and which vnto vs are also vnknowen.

The foureteenth Booke treateth of Trees and fruitfull Plantes.

IN times past men were wonte to haue many pleasant trées, of the which nowe there is no mention, for euery one studieth couetousnesse.

The Wine groweth of wilde plantes, and among all other plantes it is the principallest fruite, and there are many kindes, and euery yéere it must be cut, or else otherwise it would compasse a whole Towne.

Wine is the blood of the Earth, it being taken within a mans body is hote, and without it is colde, it is bothe comfortable and profitable to a man, if it be taken measurably, otherwise it is very hurtfull.

Alexander the great did vanquishe the whole worlde, and yet could not so well kéepe him selfe, but was ouercome with the force of Wine.

Wines is not permitted to the wiues of Rome.

We reade that King Romulus did pardon and forgiue a Senatour of Rome called Ignatius Mecennus, which had killed his wife with a Clubbe, for that she was founde drinking wine out of a tunne.

And therefore Cato did ordaine that women and maydens should be kissed of their parents and kinsfolke, to the ende they should knowe whether they did smell of Wine or no.

Marcus Varo writeth of a Consull which neuer made banquet, nor had at his table more at one time then at an other, for feare of to much drinking.

In times past at Rome the price was set on wine, to the ende that little should be drunke, but since Cæsar made great

great banquettes, which gaue occasion to make prouision at Rome for all kinde of wines. Wine alone serueth to make medicines.

There is wine made of Peares, Apples, and of other trées, which they vse toward the East.

Some make Wine of hearbes, of water and hony sodden, which in Wales is called Metheglyn, that will laste fiue yéeres, or with Hony and Vineger, which is called Oximell.

The small wines ought to touch the ground for to bee the better kept, but not the good. The flower of white wine is good, and that of red is naught. By drunkennesse men reueale their secrets, and make debates.

The fifteenth Booke treateth of Trees bearing fruite.

The Olive trée groweth not neare the Sea, nor in places to hote nor to colde: they must bée cut like Vines. The Olive oyle is of a better sauour when the Olives beginne to ripe, but there is not so much when they beginne to be black, but that is the time to take them, and of their ripenesse. There is more paine to make Oyle then wine.

The Olive hath stone, oyle and flesh, the gréene are bitter, by drying they become lesse though ỳ the heate is cause of oyle. The liquor of the Olive is the oyle, but it lasteth not as doth wine, for it is best the first yéere.

Some there are that tary til the Olives fall from trées, for it hurteth the trées againe the yéere following, to bée cut, broken, or smitten.

Olives before they are rype will be kept with salte, after that they haue bene in hote water.

If the Olive be not cleane, it is washed and dried, three or foure dayes and seasoned with salt.

There is Oyle made of many things, of Nuttes, of Acornes,

Acornes, of small graines, of swéete smelling trées, of Gumme that serueth for medecines, of Almonds, Chelnuttes, and diuers other things, according to the Countreies. Apples and Peares ought to be kept in a drie and colde place, and for them the North winde is good and no other wyndes, when the weather is faire, they should be put on hay, seperated one from another for to take the ayre, and they ought to be gathered before the full Mone.

Nuttes make a sound or ratling in falling, when they are rypé, and among other fruites they are parted in foure within, with a little skinne betwéene both. They will kéepe gréene, being put in earthen pottes, in the earth, and with them is made good Dyles.

Chestnuttes, are a kinde of maste, and it is meruaile that nature hath so closed them in shelles.

Mulberies staine a bodies fingers, and they are of thrée colours, at the first they are white, after that become redde, and when they are ripe then they are blacke.

Cheries will kéepe dried with the Sunne, as Olives. There are many relellings in fruites, as swéete, waterish, sower, bitter, gréene, salt, brackish, fatte, and diuers others, amõg the which there are that haue many tastes together.

The Wynes are swéete and sower, pricking. Milke is swéete and fatte, but there are thrée principall Elementes, without sauour and without smell, as water, fire, and the ayre. The Laurell is dedicated to triumphes, and Emperours beare thereof on their heads, principally because it kéepeth the persons from thunder.

The sixtenth Booke treateth
of wylde trees.

THe Acornes commeth of Oke trées of diuers sortes, for some there are better then others, and in time of famine ỳ good Acornes dried may be grinded to make bread. Acornes be most swéetest when that they are newe,

newe, and roasted in the imbers.

The Oke is beste for to builde withall, either houses or shippes, because it will longest last.

If an Oke tree be smitten with the thunder, it beareth fewe Acornes or none, and is so bitter, that no beaste will eate thereof but Hogges, and when they are very hungry.

The Beeche tree, beareth a kinde of masse the whiche reioyceth the Hogges being fedde with them, their flesh is sone sodden, and very profitable for the stomacke.

Taxus is a tree like vnto a Pyne tree.

In Arcadia it is so venemous that no beast dare sleepe vnder the shadowe of it, nor eate thereof.

The Cuppes that are made of this wood, to put Wine in, are venemous.

It is said that the venime of this wood reasseth, when there is nayled therein a nayle of brasse.

An Elme tree, the leaues thereof is mortiferous to Mares, but it hurteth not the beastes that shadowe vnder it, to drinke the liquor of it, is good against the biting of Serpents, for neuer Serpent resteth vnder the shadowe thereof, and he that will compasse a Serpent about a fire with the leaues of this tree, the Serpent will rather take the fire then escape through those leaues.

The Tilia of some called the Meybe, hath Male and Female, for the Female alone beareth floures and seede. The iuyce of the barke and leaues is sweete, but no beast will eate of the fruite, betweene the barke and the wood there are many little thinne pelles or skinnes, with the which are made Ropes.

The Maple if it were so great and so high as the Cedar, should be preferred because of his propernesse.

With this tree is made Tables being of a blackishe colour.

The Bore tree spreadeth very large and thicke, and is very proper because of his shadow.

There are certaine wilde trees, that neuer lese their

leafe, as the Cedar, the Jeniper, the Holly trée, and others.

The Jeniper for his leafe hath a sharp pricke or thorne.

There are certaine places in Egypt whereas some trées will not growe.

Other trées there are that leaue their leaues sooner then the reste, and the difference thereof commeth, for that their fruite is sooner ripe then others: but Almond trées, the Esshe, and others, haue their fruite with the first, and cast their leaues with the laste.

The Mulberie trée bringeth her fruite late, and falleth her leaues with the first.

The trées after the maner of beastes doe conceiue in Januarie with the winde, some sooner then others, and after a straight winde, beginneth the floures to appeare, and nourish the fruite.

Vines in some places beareth twice a yéere. The rootes are diuers according to the diuersitie of trées.

Esculus as writeth Virgil is a trée, that hath such profunditie or deepenesse in the earth, as it hath aboue the ground in height.

The Ciper trée is slowe in growing without the ground be fat and fertile, then it spreadeth verylarge and long.

And thus to conclude, I finish this abstract, till further occasion shallserue, geuing God moste hartie thankes for these his benefites and giftes geuen for the vse of mankinde.

To whome be all honour and praise for euer and euer Amen.

FINIS.